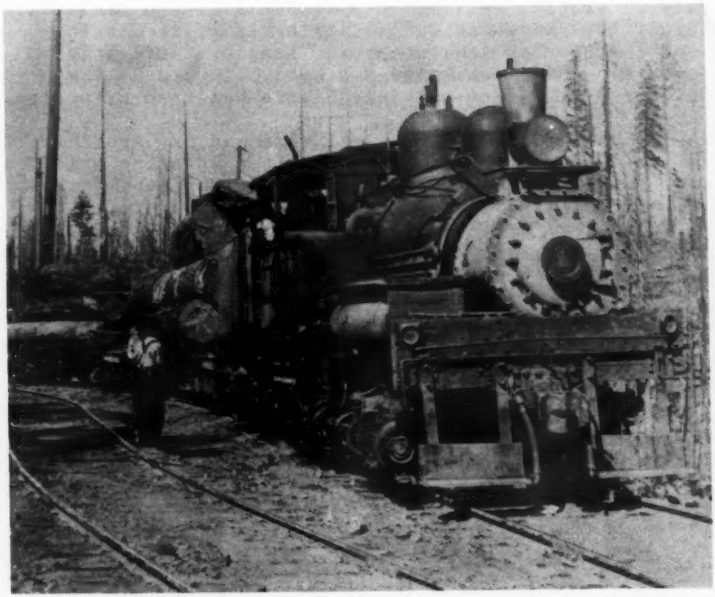
Transportation Library

The WESTERN RAILROADER

For the Western Railfan



HUTCHINSON LUMBER COMPANY (Now Feather River Pine Mills) log train headed by engine #1 near Feather Falls--Mill was at Oroville. - Photo via Dan McKillips

Vol. 14, No. 3 JANUARY 1951 Issue No. 135

The Western Railroader

For the Western Railfan

P. O. BOX 668, SAN MATEO, CALIF.

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Ten Issues for a Dollar

Official Publication

RAILFAN EXCURSIONS At the meeting of the Railfan Excursion Advisory Board held January 8th the following excursions were listed as being planned for 1951:

Jan. 14 - Northern Cal's Municipal Railway Trolly Trip
Jan. 21 - Bay Area's S.N. Birney car trip (member only)
Feb. 11 - Bay Area's Pacific Electric trip
Mar. 10-11 - Cal-Nevada's Shasta Daylight-Yreka Western
Apr. 1 - Northern Cal's Zephyrette trip
Apr. 15 - Ry & Loco's ferry & train trip to Calistoga
May 5-6 - R&LHS-CNRHS WP-Quincy-Almanor Westwood trip
May 30 or June 3 - Bay Area Sacramento Northern trip
June 16-17 - R&LHS-CNRHS Chico-Sterling City trip
July 22 - Joint Railfan trip to Santa Cruz & Monterey.
August 12 - Northern Cal's California Western trip
Sept 1-2-3 - Bay Area's Annual "Long Distance Trip"
Sept. 16 - Bay Area-Railway & Loco Shipyard Ry train trip.
October 7 - Railway & Loco's Sierra Railroad Excursion.

SACRAMENTO NORTHERN BOOK Ira Swett and Bay Area Electric have joined to bring out a 48 page ($8\frac{1}{2}$x11) photo-offset history of the Sacramento Northern with plenty of maps, rosters and pictures. It is very well done and well worth the $2.00 asked for it. Copies can be secured by writing: Ira Swett, 1414 South Westmoreland, Los Angeles, California.

CORRECTION DEPT. Last issue had some errors that should be corrected. First SP 3501 scrapped at Sacramento is one of the 2-8-4's. We are now advised that that town in Arizona is Tucson. The Sacramento Daylight was not cancelled by the San Joaquin valley floods, but operated through to Fresno where connections were made with the San Joaquin Daylight. U.S. Maritime Commission #5 was an 0-6-0T. Dolbeer & Carson only has two engines left--the #2 was scrapped some time ago.--Mostly from D.S. Richter and Al Rose.

CREDIT LINES The text and photos for the "Railroad Logging in the West" is from the October, 1949, issue of the "West Coast Timberman". The list of lumber roads does not reflect the changes during 1950 such as Michigan Cal's scrapping and other items such as appeared in our December issue.

CHANGES OF ADDRESS: Please advise us promptly if you have a change of address and always give us your old address as plates are filed geographically.

RAILROAD LOGGING IN THE WEST

From a few hundred miles of track in 1899, western loggers by 1931 had more than enough rail to twice span the American continent. Trucks have since reduced that mileage by two-thirds.

★

USE OF logging railroads for the transportation of logs in the West goes back 60 years or more. Railroads began to take over the task of moving logs as the handy timber receded from the river banks and valley floors and distances between sawmills and logging camps became too great to rely upon animal transport. Early roads were primitive and in a few cases pole roads with double flanged logging trucks were employed, using horses as the motive power. Steam locomotives in the earlier days of the western logging industry were light, direct-connected engines as small as 10 to 15 tons. The geared engine was required to cope with the steep grades as the timberline was followed up the rugged mountain slopes. Geared engines have been in use on the Pacific Coast for over 50 years. Three types vied for favor, these being the Shay, the Heisler and the Climax. These are distinguished by their distinct types of propulsion. The Heisler has its cylinders set at an angle directly under the boiler after the fashion of a V-type gasoline motor, driving a center shaft which in turn is geared to the trucks.

The Climax has two outside cylinders set at an angle of about 45 degrees, driving an articulated gear assembly.

The Shay features an off-center boiler placement, balanced by the three-cylinder engine and gear drive on the other side.

Following the expiration of the Lima-Shay patents in the late '20's, Willamette Iron & Steel Works of Portland built several engines along the lines of the Shay, making it the fourth in the field of geared engines.

For speed on the mainline, direct connected engines are favored and in many cases the geared locomotives serve to pull the loaded cars off the steep spurs, delivering their loads to the rod engines when the mainline is reached.

Rod engines of various types were featured in the hey-day of the steam locomotive in the woods. High powered saddle-tanks were in great favor on some logging roads because of their excellent tractive effort on steep grades. On longer roads where the loads were heavy and trains long, Mallet compound engines were occasionally specified. Suppliers of direct connected engines to the logging field include Baldwin, American, Porter and Vulcan.

Gasoline locomotives made their appearance briefly before the rise of the motor truck. Several were used by The Diamond Match Co. in Idaho, until they were supplanted by trucks during the war. On the road of Potlatch Forests Inc. at Lewiston, Idaho, modern diesel locomotives are now sharing the scene with steam engines. These are fitted with two-way radio equipment keeping them in constant touch with the dispatcher and camp headquarters.

The only examples of electric locomotives in logging service of which we have record, were those of The Red River Lumber Co., during its operations at Westwood, California, before the sale of the mill and logging properties to Fruit Growers Supply Co.

Logging railroads still have their adherents in the West and some operators contend that nothing can beat the rail-

RAILROAD LOGGING IN WEST

road for economy in long distance haul ing. What others declare to be the last major logging railroad development in the West is the new line of the Weyerhaeuser Timber Company, out of Sutherlin, Oregon, built to serve as one of the two main supply lines for Weyerhaeuser's new sawmill and pulp mill at Springfield, Oregon. A second timber tract feeding this great milling project has been developed by a joint-user truck road system.

From an engineering standpoint one of the most spectacular logging railroad systems in service in the West is the line of the Southwest Lumber Mills Inc. of McNary, Arizona. This 90-mile road rises to an elevation of over 9,000 feet to reach the pine holdings of that company in the Arizona mountains.

Electric locomotives challenged steam briefly in northern California in 1926 when The Red River Lumber Co., employed several American-General Electric engines of this type in logging road service. The switch from steam to electricity was made possible by the convenient location of a big hydro-electric development on Lake Almanor. The engines were rated at 100 tons.

During the last two years diesel-electric locomotives have made their appearance on at least four logging railroads in the West. Units have been placed on the rails of the Weyerhaeuser Timber Co., railroads at Vail-McDonald and Longview, Washington and at Springfield, Oregon. These 1000-hp. locomotives can get under way in ten minutes from a cold start.

Engineering Achievements

Some truly remarkable engineering feats have been performed by the builders of the West's logging railroad system. Among these are outstanding timber bridges, boldest of all being the Baird Creek span of the Weyerhaeuser Timber Co., on its Longview line. This notable timber structure is 1130 feet in length and rises 235 feet above the level of Baird Creek. Over 400,000 feet of treated timber went into the bridge, together with more than 200,000 feet of piling and other untreated members.

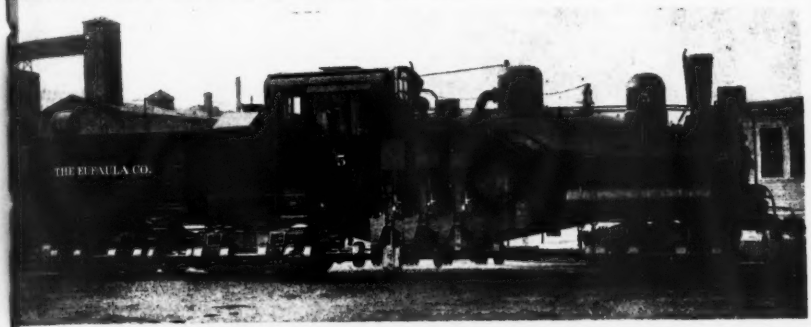
The Baird Creek bridge consists of an untreated pile bent approach 250 feet long; next a center section composed of a three-hinge treated timber arch surmounted by a frame bent superstructure 480 feet long; and then another approach of driven pile bents 400 feet long, making a total length of 1130 feet. The width of the arch is 120 feet and its height 105 feet above the low water level of Baird Creek. On the steep slope of the east bank, apparently an old slide, four panels of driven treated piles are provided to carry the superstructure at this point. The piling on the shorter west approach are set into holes in the rock and grouted with concrete.

Surmounting the treated timber arch are four framed stories 30 feet each in height. Each bent consists of five post members 14x16 inches corresponding in size to main members of the arch. Sway bracing is 3x10 and all girts are 6x12. Piles used in the span are 14 inches in diameter at the cutoff and range up to 120 feet in length on the west approach. Wood girders are 31 inches deep, placed three in a chord.

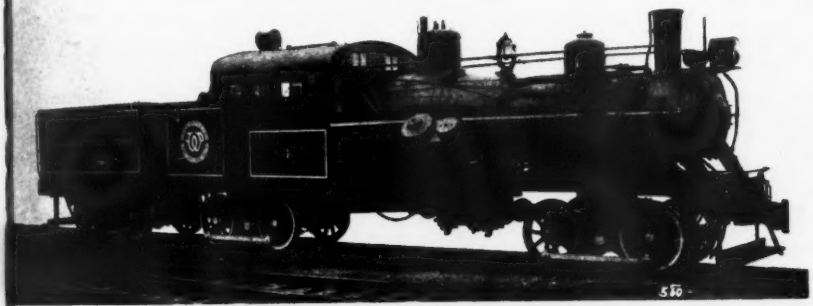
The Baird Creek span gives access to a big body of timber in the Kalama River Basin, destined to feed the mills at Longview for 20 years or more. Walter J. Ryan, who recently retired from active service with Weyerhaeuser, was chief engineer on this project.

Last important logging railroad to be built is the line of the Weyerhaeuser Timber Co., to serve the new sawmill and pulp development at Springfield, Oregon. Put in service in 1949, it probably represents the last major project of its kind in the Douglas fir region.

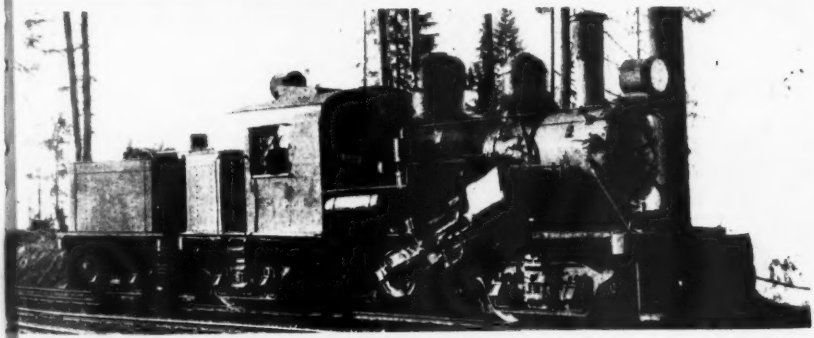
ARED LOCOMOTIVES ENGINEERED FOR RUGGED SERVICE DEMANDED ON WESTERN LOGGING RAILROADS



LLAMETTE. Upon expiration of the Shay patents, Willamette
n & Steel Works of Portland, Oregon, entered the locomotive
. This is a 90-ton engine built for the Eufaula Company, sub-
sidiary of the former Eastern & Western Lumber Co. A number of these locomotives are still in service in the western logging industry although building has been discontinued.



SLER. This is another of the triumvirate of geared locomotives
d on the logging railroads of the West. This is the Heisler,
s 90, West Coast Special, built for the Weyerhaeuser Timber
Company for use on the Vail, Washington, railroad. The Heisler is distinguished by its V-type engine placement, driving a center crank geared to the front and rear trucks.



MAX. Another of the group of geared engines which enjoyed
pularity in the logging field. This engine built for the Crown
lamette Paper Company, was formerly used on the lower
Columbia River. Note the distinctive placement of the cylinders which work at an angle of about 45 degrees, driving a center crank attached to the front and rear trucks.

ARIZONA

Saginaw & Manistee Lumber Co., Flagstaff (35 miles).
Southwest Lumber Mills, Inc., McNary (100 miles).

CALIFORNIA

Michigan California Lumber Co., Camino (20 miles).
Ralph L. Smith Lumber Co., Canby (20 miles).
California Door Co., The, Diamond Springs (33 miles).
Dolbeer & Carson Lumber Co., Eureka (15 miles).
Hammond Lumber Co., Eureka (31 miles).
Feather River Pine Mills, Inc., Feather Falls (18 miles).
Northern Redwood Lumber Co., Korbel.
Clover Valley Lumber Co., Loyalton (45 miles).
McCloud River Lumber Co., The, McCloud (60 miles).
Santa Cruz Lumber Co., Santa Cruz (6 miles).
Pacific Lumber Co., The, Scotia (25 miles).
Pickering Lumber Co., Standard (65 miles).
Diamond Match Co., The, Stirling City (45 miles).
West Side Lumber Co., Tuolumne (68 miles).
Long-Bell Lumber Co., The, Weed (60 miles).
Fruit Growers Supply Co., Westwood (60 miles).

IDAHO

Potlatch Forests, Inc., Lewiston
Potlatch Forests, Inc., Potlatch (45 miles).
Craig Mountain Lumber Co., Winchester (18 miles).

OREGON

Brooks-Scanlon, Inc., Bend (60 miles).
Shevlin-Hixon Co., The, Bend (65 miles).
Coos Bay Lumber Co., Coos Bay (60 miles).
Lorane Valley Lumber Co., Cottage Grove (23 miles).
Long-Bell Lumber Co., The, Eugene (1 mile).
Stimson Lumber Co., Forest Grove (14 miles).
Edward Hines Lumber Co., Hines (45 miles).
Kinzua Pine Mills Co., Kinzua (13 miles).
Weyerhaeuser Timber Co., Klamath Falls.
Medford Corporation, Medford (65 miles).
C. D. Johnson Lumber Corp., Toledo (20 miles).
Valsetz Lumber Co., Valsetz
Oregon-American Lumber Corp., Vernonia (30 miles).
Edward Hines Lumber Co., Westfir (10 miles).

MONTANA

Anaconda Copper Mining Co., Bonner (1 miles).
J. Neils Lumber Co., Libby (2 miles).

NEW MEXICO

New Mexico Timber Co., Albuquerque (1 miles).

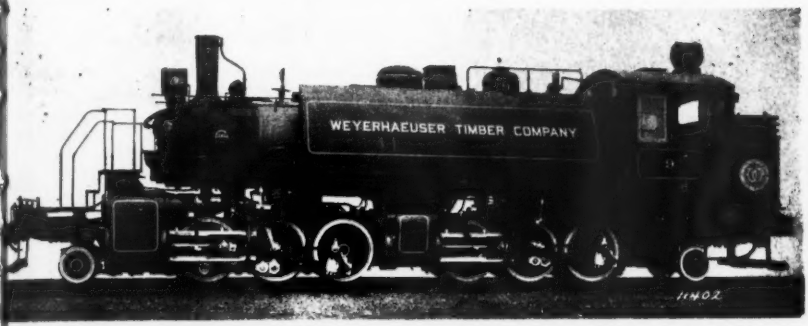
WASHINGTON

Ozette Timber Co., Beaver (30 miles).
Crown Zellerbach Corp., Cathlamet (3 miles).
Puget Sound Pulp & Timber Co., Cle Lake (30 miles).
Sauk River Lumber Co., Darrington (3 miles).
Deep River Timber Co., Deep River (miles).
Mullenix Brothers, Doty (½ mile).
White River Lumber Co., Enumclaw (10 miles).
Soundview Pulp Co., Everett (6 miles).
J. Neils Lumber Co., Klickitat (52 miles)
Kosmos Timber Co., Kosmos (75 miles).
Long-Bell Lumber Co., The Longview (4 miles).
Weyerhaeuser Timber Co., Longview (17 miles).
M. B. Logging Co., Markham (11 miles)
St. Regis Paper Co., Mineral (23 miles).
Harbor Plywood Corp., National (5 miles)
Biles-Coleman Lumber Co., Omak (2 miles).
Simpson Logging Co., Co., Shelton (9 miles).
Cascade Lumber Co., Yakima (8 miles).

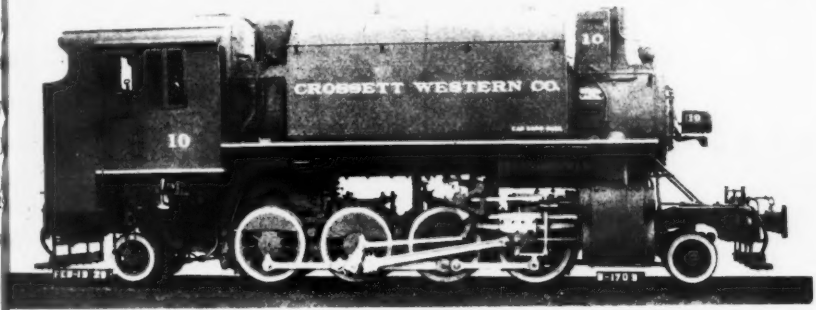
BRITISH COLUMBIA

Bloedel, Stewart & Welch, Ltd., Bloed (50 miles).
Victoria Lumber Co., Ltd., Chemainus (5
Comox Logging & Railway Co., Hea quarters (150 miles).
Salmon River Logging Co., Ltd., Kels Bay (37 miles).
Comox Logging & Railway Co., Ladysmi (50 miles).
Hillcrest Lumber Co., Ltd., Mesachie La (10 miles).
Alberni Pacific Lumber Co., Port Alber (75 miles).
Bloedel, Stewart & Welch, Ltd., Port A berni (65 miles).
Powell River Co., Ltd., Powell River (miles).
O'Brien Logging Co., Ltd., Stillwater (miles).
Canadian Forest Products, Ltd., Vancouv (50 miles).
British Columbia Forest Products, Lt Youbou (30 miles).

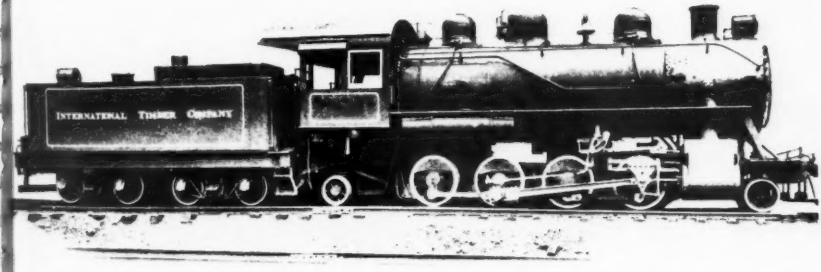
RECT CONNECTED LOCOMOTIVES CONSTRUCTED FOR MAINLINE SERVICE ON WESTERN LOGGING ROADS



LDWIN COMPOUND. Powerful mainline logging locomotive lt by Baldwin Locomotive Works for Weyerhaeuser Timber Company. This is a compound engine, type 2-6-0 + 0-6-2, carrying her water supply in a saddle tank, dispensing with tender.



MERICAN. The close-coupled saddle tank also enjoyed great opularity in the West where dozens of this type were used on he major logging railroad systems. This 2-8-2 by American Locomotive Works was operated on the line of the former Crossett-Western Company. It was equipped with superheater and had a tractive power of 28,500 pounds. The weight was 84 tons.



PORTER. For the long haul, many western logging operators favored the heavy direct connected locomotive. This is a Porter engine, type 2-8-2 once used by the International Timber Company on Vancouver Island, British Columbia. The Porter concern was formerly represented in the Pacific Northwest by Loggers & Contractors Machinery Co. of Portland, Oregon.

SD&AE ABANDONS PASSENGER RUNS The San Diego & Arizona Easte has abandoned scheduled passe ger train service: The last run of train #362 left January 11, 1951 with S.P. engine 2373 on the head end, eastbound and the return trip had S.P. 2383 westbound. Some passenger service is still provided by the scheduled freight which carr passengers between points in Mexico. While there are still steam engines on the roster, SP freight diesels 5233 and 523 handle the freight run while SP switchers 5101, 5102 and 511 do the local switching. - Eric Sanders

San Diego Electric's 400 type street cars and the remain ing PCCs are stored at Adams Avenue Carhouse. The ex-Wilkes-Barre, Salt Lake and New York cars were burned for scrap some time ago. - Jack Whitmeyer

PURDY SCRAPS AT S.S.F. The Purdy Company yard at South San Francisco has recently scrapped Santa Fe 0-6-0's 9018, 9021 and 9050 and California Western 2-8-0 #41. They also scrapped Granite Rock Co. #8 and one of the Porter tank engines. - Doug. Richter

SEATTLE "UNION STATION" DEAL The Great Northern and Northern Pacific have announced that they are ready to discuss use of their King St. Station by the Union Pacific and Milwaukee Road to permit sale of the so-called Union Depot for a terminal post office. Thayer

WASHINGTON TO BUY FERRIES Washington's Toll Bridge Authority has agreed to purchase the Black Ball Lines for $4,944,499.00. Sixteen ferry-boats including the all-steel Chippewa, Kalakala, Enetai, Illahee, Kilickattat, Nisqually, Quinault, San Mateo, Shasta and Willapa and wooden Chezemoka, Keloken, Kitsap, Klahanie, Vashion and Rosario, together with the ferry terminals (except Colman Dock, Seattle, which will be leased) are included in the deal. - Thayer

FANCY TRAIN The De-Lux, Extra Fare "Super Chief" will join the vista dome family with the addition of a dome lounge car equipped with revolving parlor type seats in the dome.

ICC OK'S PE ABANDONMENTS The Interstate Commerce Commission has approved the Pacific Electric abandonments and franchise trips ended December 28th. An all-time Chronology of PE abandonments has been prepared by the Southern California Division ERA. Copies 15¢ from Order Blank Dept., ERA, Lackawanna Terminal, Hoboken, N.J.

LATE CHANGES: All Muni A type stored after all.